

In the Claims

Claims are amended as follows:

1. (Currently Amended) A method of automatically allocating a unique internet protocol (IP) address to a first node in an integrated intermediate-system-to-intermediate-system (IS-IS) communications network said method comprising the steps of:-
 - (i) accessing information about one or more potentially available IP addresses which may be allocated to provide the first node with a unique IP address at which the first node may be contacted;
 - (ii) selecting one of the potentially available IP addresses to allocate to the first node; and
 - (iii) sending information about the selected IP address to nodes in the IS-IS communications network.
2. (Original) A method as claimed in claim 1 wherein said information is sent using a flooding method comprising the use of link state PDUs (LSPs).
3. (Original) A method as claimed in claim 2 wherein said information is sent using LSP extensions.
4. (Original) A method as claimed in claim 1 wherein said information is sent using a flooding method comprising an adaptation of the connectionless network service (CLNS) protocol.
5. (Original) A method as claimed in claim 1 wherein said step (i) of accessing information comprises accessing a server connected to the communications network.
6. (Original) A method as claimed in claim 5 wherein said information is sent using LSPs with anomalous sequence numbers.
7. (Original) A method as claimed in claim 1 wherein said step (i) of accessing information comprises accessing the first node which has pre-specified information about one or more potentially available IP addresses.

8. (Original) A method as claimed in claim 7 wherein said step (ii) further comprises receiving information at the first node about the IP addresses of other nodes in the communications network, and selecting one of the potentially available IP addresses on the basis of the received information.
9. (Original) A method as claimed in claim 8 wherein said information is received during a specified duration.
10. (Original) A method as claimed in claim 1 which further comprises using said selected IP address to access the first node using an Internet Protocol management system.
11. (Original) A method as claimed in claim 1 wherein said first node is selected from an intermediate system, a router and an optical multiplexer with integral router.
12. (Currently Amended) A server connected to an integrated intermediate-system-to-intermediate-system (IS-IS) communications network and arranged to automatically allocate an internet protocol (IP) address to a first node in that communications network, said server comprising:-
- (i) a store comprising information about one or more potentially available internet protocol (IP) addresses IP addresses which may be allocated to provide the first node with a unique IP address at which the first node may be contacted;
 - (ii) a processor arranged to select one of the potentially available IP addresses to allocate the first node; and
 - (iii) an output arranged to issue one or more messages containing information about the selected IP address to nodes in the IS-IS communications network.
13. (Original) A server as claimed in claim 12 wherein said output is arranged to issue link state PDU (LSP) messages containing information about the selected IP address.
14. (Original) A server as claimed in claim 12 wherein said output is arranged to issue messages according to the connectionless network service (CLNS) protocol which contain information about the selected IP address.

15. (Currently Amended) A communications network node for use in an integrated intermediate-system-to-intermediate-system (IS-IS) communications network and requiring a unique internet protocol (IP) address, said communications network node comprising:-

- (i) a store comprising information about one or more potentially available internet ~~protocol (IP) addresses~~ IP addresses which may be allocated to provide the first node with a unique IP address at which the first node may be contacted;
- (ii) a processor arranged to select one of the potentially available IP addresses to allocate the first node; and
- (iii) an output arranged to issue one or more messages containing information about the selected IP address to nodes in the IS-IS communications network.

16. (Original) A communications network node as claimed in claim 15 which is selected from an intermediate system, a router, and an optical multiplexer with integral router.

17-18. (Canceled)

19. (Currently Amended) ~~A~~ An integrated intermediate-system to - intermediate-system (IS-IS) communications network comprising a server as claimed in claim 12 arranged to automatically allocate an internet protocol (IP) address to a first node in that communications network, said server comprising:-

- (i) a store comprising information about one or more potentially available IP addresses which may be allocated to provide the first node with a unique IP address at which the first node may be contacted;
- (ii) a processor arranged to select one of the potentially available IP addresses to allocate the first node; and
- (iii) an output arranged to issue one or more messages containing information about the selected IP address to nodes in the IS-IS communications network.

20. (Currently Amended) ~~A~~An integrated intermediate-system to - intermediate-system (IS-IS) communications network comprising a communications network node as claimed in claim 15 requiring a unique internet protocol (IP) address, said communications network node comprising:-

- (i) a store comprising information about one or more potentially available IP addresses which may be allocated to provide the first node with a unique IP address at which the first node may be contacted;
- (ii) a processor arranged to select one of the potentially available IP addresses to allocate the first node; and
- (iii) an output arranged to issue one or more messages containing information about the selected IP address to nodes in the IS-IS communications network.